

Amendments to the Claims:

Please amend claims 1 and 31.

Please cancel claim 27 without prejudice or disclaimer.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An apparatus for dissolving or suspending a substance in a solvent comprising:

an outer chamber for containing a dense gas, wherein the outer chamber is an autoclave;

an inlet for supplying the dense gas as a solvent, wherein the inlet is configured such that the dense gas is introduced through a straight shaft and delivered to the center of the apparatus;

a porous chamber within the outer chamber for containing a substance for dissolution or suspension with the solvent, the porous chamber having a wall which allows passage of solvent and the substance dissolved or suspended in the solvent[[],]; and

an outlet for removing solvent and solution and/or dispersion from the outer chamber and a turbulence means for creating turbulence within the porous chamber, wherein the turbulence creating means comprises a drive means to rotate the porous chamber within the outer chamber.

2. (Original) The apparatus of claim 1, wherein the inlet in the outer chamber supplies solvent directly to a mouth communicating with the porous chamber.

3. (Original) The apparatus of claim 1, wherein the inlet is in the wall of the outer chamber providing dense gas to the region between the porous chamber and the outer chamber.
 4. (Original) The apparatus of claim 1, wherein the inlet supplies solvent to the porous chamber and the region between the porous chamber and the outer chamber.
 5. (Original) The apparatus of claim 2, wherein the porous chamber is further provided with a longitudinally extending shaft communicating with the solvent inlet of the porous chamber.
 6. (Original) The apparatus of claim 5, wherein the shaft is porous or perforated.
 7. (Previously Presented) The apparatus of claim 5, wherein the porous chamber is adapted to receive the substance in the region around the longitudinally extending shaft and the porous chamber is adapted to receive solvent through the shaft.
- Claims 8-9. (Canceled)
10. (Previously Presented) The apparatus of claim 1, wherein the turbulence creating means further comprises baffles extending from the inner surface of the outer chamber in the region between the porous chamber and the wall of the outer chamber.
 11. (Original) The apparatus of claim 1, wherein the porous chamber is provided with a plug to hold the substance against the base of the inner chamber.
 12. (Original) The apparatus of claim 11, wherein the plug is a planar element abutting the sides of the inner chamber and is held against the substance by a resilient biasing means.

Claims 13-25. (Canceled)

26. (Original) A method of treatment of the subject comprising the steps of administering to the subject an affective amount of particles of a biologically active substance produced using the apparatus of claim 1.

27. - 28. (Canceled)

29. (Previously Presented) The apparatus of claim 1, wherein the autoclave is adapted to provide a temperature of between 5°C and 45°C.

30. (Previously Presented) The apparatus of claim 1, wherein the autoclave is adapted to provide a pressure between about 5 to 200 bar.

31. (Currently Amended) An apparatus for dissolving or suspending a substance in a solvent comprising:

an outer chamber for containing a dense gas, wherein the outer chamber is an autoclave;

an inlet for supplying dense gas as a solvent, wherein the inlet is configured such that the dense gas is introduced through a straight shaft and delivered to the center of the apparatus;

a porous chamber within the outer chamber for containing a substance for dissolution or suspension with the solvent, the porous chamber comprising a wall allowing passage of solvent and the substance dissolved or suspended in the solvent, and a longitudinally extending shaft in fluid communication with the inlet, wherein the shaft is porous along the length of the shaft; and

an outlet for removing solvent and solution and/or dispersion from the outer chamber and a turbulence means for creating turbulence within the porous chamber, wherein the turbulence creating means comprises a drive means to rotate the porous chamber within the outer chamber.